

REMARKS

The present invention is a method of controlling access of a subscriber to a network, a system a method of controlling access of a subscriber to register a network and a system. A method of controlling access of a subscriber 18 to a network in accordance with an embodiment of the invention includes sending 4 an identification of the subscriber and an access to be provided to the subscriber from a visited network 12 of a plurality of networks 12, 14, and 16 connected to a home network 10; in response to the identification of the subscriber and access to be provided to the subscriber, storing 5 a subscriber profile of an authorized access to be provided to the subscriber; and controlling access of the subscriber to any network dependent upon comparison of the access to be provided to the subscriber and the stored subscriber profile. See page 12, lines 5-11, of the specification. Numerous examples of the foregoing subject matter are discussed in association with Figs. 1-9.

Claims 1-31 and 34-84 stand rejected under 35 U.S.C. §102 as being anticipated by United States Patent 5,742,668 (Pepe et al). These grounds of rejection are traversed for the following reasons.

As the Examiner is aware, for an anticipation rejection to be appropriate, the Examiner must demonstrate that every limitation of the claim which is rejected on grounds of anticipation is found in the reference either literally or under the doctrine of inherency. A single difference between the claimed subject matter and the reference renders a rejection on grounds of anticipation inappropriate.

Each of independent claims 1, 34, 37, 68 and 78 are not anticipated by Pepe et al for the following reasons.

Pepe et al disclose an electronic messaging network in which a personal communications interworking (PCI) 40 is connected as an interface between wireline networks 29 and wireless networks 39. See Fig. 1. The PCI provides a subscriber control for message routing and delivery in accordance with a subscriber accessible subscriber profile stored in the PCI. See column 21, lines 13-28. The PCI 40 includes a PCI server. Fig. 2 shows a simplified version of interconnections between messaging systems and a PCI. The subscriber provides the PCI 40 with message routing and delivery instructions which are received by PCI database and stored in a subscriber profile for the subscriber. The database controls the delivery of outgoing messages and the routing of incoming messages and message notification. See column 5, lines 64-67, through column 6, lines 1-18. The PCI database stores service related information for mapping services to subscribers. See column 6, lines 47-65.

It is noted that Pepe et al describe in the background of his invention the well-known utilization of location tracking using a home location register (HLR) and a visiting location register (VLR). See column 2, lines 13-37. However, Pepe et al state in column 2, lines 38-39, that "[t]he interoperability problem for service management is much more complex than that for location tracking" with the reference to location tracking being the previous teaching regarding the HLR and VLR. While Pepe et al's teachings clearly are addressed to a roaming subscriber by permitting remote access to the PCI 40, there is no description of a system

architecture involving home and visited networks as recited in the independent claims in association with the functions recited therebetween.

A person of ordinary skill in the art would understand the teachings of Pepe et al to be addressed to permitting a subscriber to remotely control how calls to and from the subscriber are routed via the control of the PCI 40. However, this subject matter differs substantially from that of the independent claims.

Independent claim 1 recites:

A method of controlling access of a subscriber to a network comprising:

sending an identification of the subscriber and an access to be provided to the subscriber from a visited network of a plurality of networks connected to a home network;

in response to the identification of the subscriber and access to be provided to the subscriber, storing a subscriber profile of an authorized access to be provided to the subscriber; and

controlling access of the subscriber to any network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile.

and Independent claim 34 recites:

A system comprising:

a home network which stores a plurality of subscriber profiles each defining an access to be provided to a subscriber to a network;

a plurality of networks connected to the home network;

subscriber equipment connected to a visited one of the plurality of networks through which the subscriber obtains an access to any network; and wherein

in response to connection of the subscriber equipment to the visited network, an identification of the subscriber and an access to be provided to the subscriber is sent to the home network, and a subscriber profile of an authorized access to be provided to the subscriber is stored in one of the networks and access of the subscriber to any network is controlled by one of the networks storing the subscriber network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile.

Each of independent claims 1 and 34 require substantively an identification of the subscriber and an access to be provided to the subscriber from a visited network of a plurality of networks connected to a home network to be sent, in response to the identification of the subscriber and access to be provided to the subscriber, storing a subscriber profile of an authorized access to be provided to the subscriber; and controlling access of the subscriber to any network dependent upon comparison of the access to be provided to the subscriber.

The portions of Pepe et al regarding claim 1 and claim 34 which the Examiner referenced are column 21, lines 12-28, and column 23, lines 28-38, which do not disclose the foregoing subject matter. Column 21, lines 12-28, merely describe, as referred to above, that the PCI 40 provides the subscriber an interface to the various networks connected to the PCI to receive and deliver messages in accordance with the subscriber profile. Nothing in the referenced portion of column 21, lines 12-28, and the remainder of Pepe et al, exclusive of the prior art section involving HLR and VLR function is relevant to the claimed home or visited network and the functions therebetween. Column 23, lines 28-38, describe the subscriber sending text messages over the wireless data network or wireline data network to the PCI server 48 with the PCI server consulting the subscriber's profile and forwarding the messages to the appropriate destination depending on the routing destination found in the profile. This has nothing to do with a home network being an internet protocol network and visited network as referred to by the Examiner with respect to claim 34. Moreover, it is noted that claim 34 does not even refer to an internet protocol network and a wireless area local network.

Since Pepe et al's teachings do not describe how the PCI 40 would be utilized in association with a visited network relative to a home network, it is submitted that a person of ordinary skill in the art would not consider Pepe et al to disclose sending an identification of the subscriber and an access to be provided to the subscriber from a visited network of a plurality of networks connected to a home network as recited in claims 1 and 34. Moreover, each of independent claims 1 and 34 require storing a subscriber profile of an authorized access to be provided to the subscriber either in response to an identification of the subscriber and access to be provided to the subscriber as recited in claim 1 or in response to connection of the subscriber equipment to the visited network as recited in claim 34. Therefore, a person of ordinary skill in the art would not find the sending and storing sequence of steps suggested by Pepe et al. Pepe et al disclose a subscriber profile is stored which is not in response to the identification of the subscriber and an access to be provided to the subscriber as recited in claim 1 or in response to connection of the subscriber equipment to the visited network as recited in claim 34.

Finally, Pepe et al do not describe controlling access of the subscriber to any network dependent upon a comparison of the access to be provided to the subscriber and the stored subscriber profile. Pepe et al do not have a comparison built into their architecture. The stored profile of the PCI 40 is not compared to anything and is merely used as routing for receiving instructions or messages to be sent to the subscriber.

For the foregoing reasons it is submitted that claims 1 and 34 are not anticipated by Pepe et al.

Claim 37 recites:

A method of controlling access of a subscriber to register in networks comprising:

during or after the subscriber registers in a network, providing an identification of the subscriber and an access at a home network of the subscriber, the access comprising an identification of access to one of the networks in which the subscriber is registered.

The Examiner's rationale for the rejecting of claim 37 is "[a]s per claim 69, it is rejected for some reasons as stated above". It is not understood precisely what the Examiner has intended to set forth by this statement. However, claim 37 is patentable over Pepe et al for the following reasons.

Pepe et al do not describe the sequence of during or after the subscriber registers in a network of providing an identification of the subscriber and an access at a home network of the subscriber. As stated above, there is no discussion in the Pepe et al of the PCI 40 in the context of a home network or other network.

Moreover, it is submitted that Pepe et al do not provide an identification of an access at a home network to one of the networks to which the subscriber is registered. Pepe et al's disclosure is not concerned with subscriber registration and discloses the PCI 40 controlling the transmission and delivery of messages to and from the subscriber involving multiple networks through the PCI which acts as an interface to the foregoing networks. Accordingly, it is submitted that claim 37 is not anticipated by Pepe et al.

Claim 68 recites:

A method of controlling access of a subscriber to register in networks comprising:

providing an identification of the subscriber at a home network; in response to the providing of the identification of the subscriber, storing a subscriber profile of an access to be provided to the subscriber to at least the networks; and

using the stored subscriber profile in controlling service provided to the subscriber.

Claim 68 is broader than claim 1 but is not anticipated by Pepe et al. First, as set forth above, Pepe et al do not describe the utilization of a home network in the context of providing an identification of the subscriber as recited.

Moreover, as stated above, there is no disclosure of storing a subscriber profile of an access to be provided to the subscriber to at least the networks "in response to the providing of an identification of the subscriber" as recited as the second step in claim 68. Finally, since there is no stored subscriber profile as defined in the second step of claim 68, the claimed using the stored subscriber profile in controlling service provided to the subscriber is also not taught.

Claim 78 recites:

A system comprising:
networks in which the subscriber may register;
a home network in which a plurality of subscriber profiles are stored, each of the profiles defining an access to be provided to a subscriber while registered in networks;
subscriber equipment which is connected to the networks while the subscriber is registered therein; and wherein
in response to connection of the subscriber equipment to one of the networks at least an identification of the subscriber is provided at the home network, a subscriber profile of an access to be provided to the subscriber to at least the networks is stored, and the stored subscriber profile is used in controlling service provided to the subscriber.

Claim 78 is patentable for the same reasons set forth above with respect to claim 34 and further, as stated above, Pepe et al do not discuss registration in their system and therefore, do not meet the registration limitation of claim 78.

Dependent claims 2-31, 35-67, 69-77 and 79-84 define further aspects of the present invention which are not anticipated by Pepe et al.

Claims 32 and 33 stand rejected under 35 U.S.C. §103 as being unpatentable over Pepe et al in view of United States Patent 5,84,950 (Dare et al). Claim 32 further limits claim 1 in reciting an application level registration message containing the identification of the subscriber and the access is generated in response to a request from subscriber equipment to a visited network; and in response to an entity in the visited network receiving the request, an address of an entity in the home network is obtained from a routing analysis in the visited network; and the application level registration message is transmitted to the address in the home network and further, claim 33 limits claim 32 in reciting that an entity of the home network obtains the subscriber profile in response to receipt of the application level registration message. This subject matter is not rendered obvious by the combination of Pepe et al in view of Dare et al.

Dare et al disclose a method and system for authenticating users to multiple computer servers by a single sign on. It is submitted that this subject matter is not analogous to that of the present invention.

It is noted that the Examiner has relied upon column 2, lines 25-30, of Dare et al. However, column 2, lines 25-45 of Dare et al describe if there is a request for the workstation for accessing a ticket based server within the distributed computing network, the authentication broker will issue a passticket to the workstation. Finally, if there is a request from the workstation for assessing a password based server within the distributed computing network, the authentication broke will issue a password to the workstation providing access to all of the above

servers within the distributed computing network by a single network authentication request.

It is submitted that this subject matter is not analogous to that of the present invention and does not teach what the Examiner states those portions of Dare et al are stated to teach to an ordinary person of skill in the art.

If the Examiner persists in the stated reliance on Dare et al, it is requested that he specifically point out how the disclosure in Dare et al, pertaining to multiple computer servers, is related to the claimed subject matter and furthermore, why a person of ordinary skill in the art would be motivated to combine Dare et al with Pepe et al to arrive at the subject matter of claims 32 and 33.

In view of the foregoing remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (0172.38601PX1) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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Attachments

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